INFLUENZA IN MANITOBA – 2008/2009 SEASON

Tuesday, February 17th, 2009
Report on Cases reported up to end of February 14th, 2009

Please note, that due to errors in lab reporting, issue #5 of the Manitoba Influenza Report required modification. This is the revised version.

Dear Colleague,

The following report details influenza activity in Manitoba from the start of the 2008/2009 flu season. The public health disease surveillance system of Manitoba Health and Healthy Living received its first laboratory-confirmed positive case of influenza for the season during Week 2 of 2009, January 11 to January 17, 2009. To date there have been 4 laboratory-confirmed cases of Influenza A and 5 lab-confirmed cases of Influenza B in the province. Our first two Influenza B cases have been characterized to be Flu B/Malaysia/2506/04-like.

LABORATORY-CONFIRMED INFLUENZA

- Reports of culture isolations and EIA detections from Cadham Provincial Laboratory (CPL) are forwarded to the public health disease surveillance system of Manitoba Health and Healthy Living weekly.
- The number of positive cultures is an underestimate of the total number of cases, since not all persons with influenza seek medical attention, and of those that do, not all are cultured for the virus.
- While EIA detections and culture isolations comprise the largest number of reports from CPL, seroconversions are similarly forwarded to the public health disease surveillance system weekly. Information contained within this update is based on positive lab reports (with specimen dates on or before Feb. 14h, 2009) received at the CDC Unit as of February 17th, 2009.

- The specimen date (acute specimen date for seroconversions) is used to:
  (a) extract cases; and,
  (b) assign cases to the appropriate week/month

INFLUENZA A

- There have been four cases of Influenza A reported this season in Manitoba.
- Refer to Table 1 for a summary of cases by Regional Health Authority (RHA) and week of specimen collection.
- Refer to Table 2 for a summary of cases by age group.
- Refer to Figure 1 for an illustration of the number of laboratory-confirmed cases by month and year in Manitoba, 2003/2004 to 2008/2009.

INFLUENZA B

- There have been five cases of Influenza B reported this season in Manitoba.
- Refer to Table 1 for a summary of cases by Regional Health Authority (RHA) and week of specimen collection.
- Refer to Table 2 for a summary of cases by age group.
- Refer to Figure 2 for an illustration of the number of laboratory-confirmed cases by month and year in Manitoba, 2003/2004 to 2008/2009.

REPORTS OF INFLUENZA OUTBREAKS

- For the 2008/2009 season, ILI outbreaks are defined as:
  Schools and work sites: *greater than 10% absenteeism on any day most likely due to ILI*

Residential institutions: *two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case. Institutional outbreaks should be reported within 24 hours of identification.*

- Reports of suspected/confirmed influenza outbreaks are directed to the public health disease surveillance system by:
  (a) completion and fax submission of an outbreak form [confidential fax: (204) 948-3044] by regional public health / infection control staff
  (b) an email from CPL advising of the assignment of an outbreak code;

- As of February 14th, 2009, there have been two outbreaks of influenza reported to the public health disease surveillance system since the beginning of the current flu season (one in a school setting in North Eastman [influenza B] and another within a PCH in Winnipeg [Influenza A]). These outbreaks of influenza must be accompanied by a positive influenza lab report to be counted.

NATIONAL FLU WATCH PROGRAM

- Manitoba Health & Healthy Living participates in the National Flu Watch Program co-ordinated by the Public Health Agency of Canada and the College of Family Physicians of Canada. In addition to laboratory-confirmation of influenza, this program relies on weekly reports of influenza-like illness (ILI) as reported by 15 current Manitoban sentinel physicians. These sentinels reflect cases found in eight regional health authorities. The breakdown of sentinels are as follows:

RHA	# of Sentinels within FluWatch	Population of region (2007 stats)
North Eastman	1	40722
South Eastman	1	63524
Central	4	102875
Brandon	1	49789
Winnipeg	5	670845
Parkland	1	41666
Interlake	1	77162
Burntwood	1	46628

- The CDC Branch receives *weekly* reports from the Public Health Agency of Canada presenting the provincial ILI rate and the specific data for each of the participating sentinel physicians. Not all sentinel physicians participate in the program each week: Seven of the 15 sentinels participate in swabbing for influenza with their ILI patients.

- For the 2008/2009 season, ILI in the general population is defined as:
  Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which could be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

- Refer to Figure 3 for an illustration of the ILI rate as it relates to the number of laboratory-confirmed cases of influenza.

INFLUENZA-RELATED DEATHS

- Reporting of influenza-related deaths is likely incomplete. Reports are based on notification by:
  (a) Chief Medical Examiner;
  (b) Medical Officers of Health in the Regional Health Authorities
  (c) Infection Control Practitioners in long term care facilities
- There have been no suspected influenza-related deaths reported this season. These deaths must accompany a lab confirmed report of influenza infection to be counted.

CONTACT INFORMATION

Should you have any questions or comments about this report, please do not hesitate to contact:

- Epidemiology: Myrna Dyck (204) 788-6786
- Programme: Jennifer McTaggart (204) 788-6330
  Michelle Long (204) 788-6725

For other CDC Branch reports, please view the Manitoba Health & Healthy Living Internet Website:
http://www.gov.mb.ca/health/publichealth/cdc/surveillance/index.html

For national surveillance data, refer to:
http://www.phac-aspc.gc.ca/fluwatch/index/html

Table 1: Reported Cases of Influenza A and B by Regional Health authority and Week of Specimen Collection, Manitoba 2008/2009

Influenza A - Number of Cases by RHA (based on specimen collection date)

RHA	07/12 - 13/12	14/12 - 20/12	21/12 - 27/12	28/12 - 03/01	04/01 - 10/01	11/01 - 17/01	18/01 - 24/01	25/01 - 31/01	01/02 - 07/02	08/02 - 14/02	15/02 - 21/02	22/02 - 28/02	01/03 - 07/03	08/03 - 14/03	15/03 - 21/03	22/03 - 28/03	TOTAL
Winnipeg	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	**3**
Brandon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
North Eastman	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
South Eastman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Interlake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Assiniboine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Parkland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Norman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Burntwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Churchill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MANITOBA	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**

Influenza B - Number of Cases by RHA (based on specimen collection date)

RHA	07/12 - 13/12	14/12 - 20/12	21/12 - 27/12	28/12 - 03/01	04/01 - 10/01	11/01 - 17/01	18/01 - 24/01	25/01 - 31/01	01/02 - 07/02	08/02 - 14/02	15/02 - 21/02	22/02 - 28/02	01/03 - 07/03	08/03 - 14/03	15/03 - 21/03	22/03 - 28/03	TOTAL
Winnipeg	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
Brandon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
North Eastman	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	**2**
South Eastman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Interlake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Central	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	**2**
Assiniboine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Parkland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Norman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Burntwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Churchill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MANITOBA	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**

Table 2: Reported Cases of Influenza A and B by Age Group, in Manitoba 2007/2008

Age Group	Influenza A		Influenza B	
	# of cases	% of total	# of cases	% of total
<2 yrs	1	25.00%	1	20.00%
2-4 yrs	0	0.00%	0	0.00%
5-9 yrs	0	0.00%	0	0.00%
10-14 yrs	0	0.00%	1	20.00%
15-19 yrs	0	0.00%	1	20.00%
20-24 yrs	0	0.00%	1	20.00%
25-29 yrs	0	0.00%	0	0.00%
30-39 yrs	1	25.00%	1	20.00%
40-49 yrs	0	0.00%	0	0.00%
50-59 yrs	0	0.00%	0	0.00%
60-69 yrs	0	0.00%	0	0.00%
70-79 yrs	2	50.00%	0	0.00%
>79 yrs	0	0.00%	0	0.00%
missing	0	0.00%	0	0.00%
TOTAL	4		5	

Figure 1: Laboratory-Confirmed Cases of Influenza A, 2002/2003-2007/2008

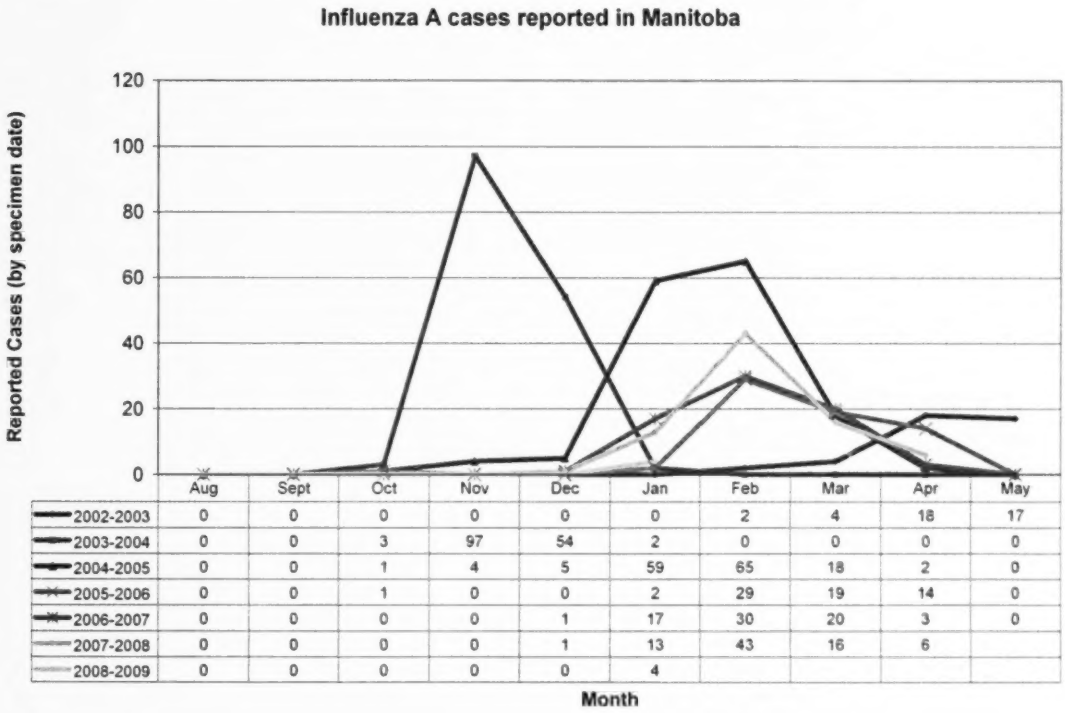
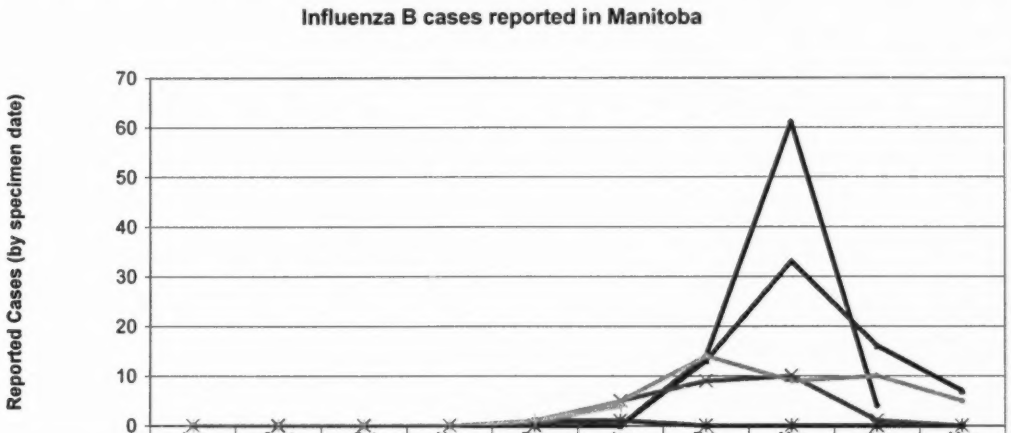


Figure 2: Laboratory-Confirmed Cases of Influenza B, 2002/2003-2007/2008



	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
2002-2003	0	0	0	0	0	0	14	61	4	
2003-2004	0	0	0	0	1	1	0	0	0	0
2004-2005	0	0	0	0	0	0	13	33	16	7
2005-2006	0	0	0	0	0	5	9	10	1	0
2006-2007	0	0	0	0	0	1	0	0	0	0
2007-2008	0	0	0	0	1	5	14	9	10	5
2008-2009	0	0	0	0	1	4				

Figure 3: Influenza-Like Illness (ILI) Rate, Number of Influenza A and B Cases by Week of Specimen Collection and Number of Sentinels Participating in FluWatch, 2007/2008 Season by Week